

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A device for a continuously operated dilution of a slurry sample, through which device the slurry sample is fed directly into a continuously operated optical analyzer, such as a grain size analyzer, ~~and which device comprises~~ comprising
 - a) a downwardly narrowing chamber;
 - b) elements for feeding the slurry sample into the downwardly narrowing chamber;[[,]]
 - c) elements for feeding diluting liquid into the downwardly narrowing chamber; and
 - d) elements for removing solids contained in the slurry;[[,]] ~~as well as~~
 - e) elements for discharging both the liquid contained in the slurry and the liquid used for dilution;[[,]] and
 - f) an analyzer cell;wherein the downwardly narrowing chamber is connected to the analyzer measurement cell, and wherein the device comprises at least one downwardly narrowing chamber comprises two opposite walls that is connected to the analyzer measurement cell so that two opposite walls of the chamber are essentially parallel both with respect to each other and with respect to the respective corresponding walls of the analyzer measurement cell.
2. (Currently amended) [[A]] The device according to claim 1, wherein in the device further comprising there is installed at least one liquid conduit provided with a nozzle element in order to feed diluting liquid into the chamber and in order to advantageously agitate the liquid contained in the chamber.
3. (Previously presented) [[A]] The device according to claim 2, wherein the liquid conduit is installed symmetrically with respect to the walls of the chamber.
4. (Cancelled)

5. (Currently amended) ~~[[A]]~~ The device according to claim 2, ~~wherein the device comprises two~~ further comprising a second downwardly narrowing chamber, wherein the downwardly narrowing chambers ~~chambers that~~ are in liquid connection with each other and are at least partly filled with liquid.
6. (Previously presented) ~~[[A]]~~ The device according to claim 5, wherein the first and second chambers of the device are mutually arranged so that the bottom part of the first chamber is connected to the top part of the second chamber.
7. (Currently amended) ~~[[A]]~~ The device according to claim 5, wherein the cross-sectional area of ~~the flow aperture of~~ the top part of the second chamber is larger than the cross-sectional area of ~~the flow aperture of~~ the bottom part of the first chamber.
8. (Currently amended) ~~[[A]]~~ The device according to claim 5, wherein the liquid conduit includes nozzle elements comprising at least one ~~or several nozzles~~ nozzle for feeding diluting liquid into both chambers ~~in order to advantageously agitate the liquid contained in the chambers.~~